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Capturing the Distance Learning in Indonesian Higher Education: Lecturers and Students' Perspectives during Pandemic for Post-Pandemic

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ABSTRACT

Since the pandemic, some universities can act swiftly to develop distance learning mechanisms, but others organize distance learning sporadically by allowing each lecturer to manage without standards. This research used a qualitative survey involving 66 students and 57 lecturers from various universities in Indonesia. It delivered dual perspectives between students and lecturers to improve previous research that did one perspective only. Most recognized the benefits of time and location flexibility when participating in distance learning but were dissatisfied with its implementation. During the pandemic, students were forced to explore independently by reading slides, listening to lecturers, watching videos, discussing in the online room, and doing independent assignments without any preparation. The pandemic also significantly changed the lecturers' teaching styles. They performed several variations in delivering material, increasing interaction in discussion forums, and evaluating the learning. Generally, distance learning without complete preparation since the pandemic was relatively good, as indicated by (1) lecturers' satisfaction with the course material delivery, (2) students' activeness according to the lecturer, and (3) learning outcomes achievement. These findings become insight for university stakeholders to enhance distance learning processes in the post-pandemic era since students and lecturers have felt its benefits but require many improvements.

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1. INTRODUCTION

The COVID-19 pandemic has occurred since the beginning of 2020 and is ongoing until 2022. Although this pandemic has caused many casualties, it has triggered a massive digital transformation in various sectors. One sector that has experienced a significant impact on digital transformation due to the COVID-19 pandemic is education (Bork-Hüffer et al., 2021; Chan, 2020). Learning activities that were regular physical meetings must suddenly transform into a virtual model (known as distance learning) (Coulange, Stunell, & Train, 2021; Hartnett, 2021). By implementing the concept of e-learning, many universities have utilized Information Systems/Information Technology (IS/IT) to support the learning process (El Refae et al., 2021; Perera & Perera Abeysekera, 2022). Since the pandemic outbreak, universities must quickly carry out a complete digital transformation (Ahmed et al., 2020; Goudeau et al., 2021). The Ministry of Education and Culture of Indonesia (2020) claimed that some universities and educators are not ready due to having no experience conducting distance learning. Some universities can act swiftly to develop distance learning mechanisms (Serdyukov, 2021), but others organize distance learning sporadically by allowing each lecturer to manage without standards. It can be a potential gap in the quality of education in the future because some students in Indonesia can enjoy a ready and mature distance learning system while others do not.

The implementation of distance learning itself has been going on for more than a year. Although infected people were fewer, many stakeholders knew the benefits of distance learning. Therefore, distance learning will be practised continuously and is not inevitable. It means that universities that have not yet improved the quality of distance learning implementation must absorb the knowledge and best practices carried out by universities whose distance learning is stable.

Distance learning manifests the learning process to minimize the physical interaction between students and educators (Bork-Hüffer et al., 2021). Its main trigger is the physical location separation between students and educators, so the learning process requires media to bridge their interaction. Internet network development has been legalized and formalized in various countries as a catalyst for distance learning. The distance learning implementation can potentially be explored from various sides, especially regarding the conditions of each student in separate locations (Shahriar et al., 2021).

Distance learning is closely related to electronic learning (e-learning) since the digital era encourages people to use digital platforms and IS/IT infrastructure to conduct distance learning. Serdyukov (2021) recounted two critical elements of effective electronic learning: dialogue and autonomy. Discussion in a specific context for distance learning refers to the interaction and communication processes between students and educators to have a common purpose, considering there is no chance to meet physically. Moreover, Alrabadi and Al Momani (2022) reminded us that blended learning enables students to be more active and interactive since they should be more independent. However, students can feel alienated and isolated (Ashraf et al., 2021), so their learning motivation would be disturbed. The opportunities to meet virtually and in real-time are relatively few. Meanwhile, autonomy in the specific context of distance learning refers to the independence of students to conduct learning activities, although not in the same physical environment as fellow students or with educators. Serdyukov (2021) also warned that inadequate interaction among students, institutions, and educators could lead to failure in distance learning. Georgakopulos et. Al. (2020) also reminded us that students face many risks during participation in blended learning. Moreover, Stevanovic, Božic, and Radovic (2020) and Nawale (2022) said COVID-19 accelerated distance learning since students and teachers should stay home. Another impact of the COVID-19 pandemic is the migration of all students into virtual media (Mushtaha et al., 2022), which is not supported by equitable and adequate quality infrastructure (Goudeau et al., 2021).

In addition, the physical learning context in higher education provides opportunities for students and educators to socialize with each other in shared knowledge and moral support to support the success of the learning agenda. However, the habit of sharing knowledge and moral support was missed when implementing distance learning due to students' focus on synchronous meetings and limited internet access scheduled by educators. To prevent this condition from getting out of control,

institutions must evaluate to find comprehensive information regarding the gap between physical and distance learning. Shahriar et al. (2021) also remind students and educators to adapt to the distance learning model because it is likely that the model will continue to be treated as a learning style in the future (Chan, 2020).

In a quantitative study conducted in France by Coulange, Stunell, & Train (2021), the experience of teaching staff to adapt is partially negative. Some feel a pleasant sensation over the new experience of conducting distance learning. However, educators admit they must prepare more time and equipment for distance learning. It causes as many as 89% of respondents perceive that distance learning protocols cause educational gaps, while 82% claim that the current distance learning situation makes it impossible to fulfill the complete curriculum. The quantitative research was conducted in France, which incidentally has adequate infrastructure. The situation in Indonesia may be more diverse and requires a more comprehensive and in-depth investigation or evaluation.

Many articles brought higher education as a case study, including Indonesian institutions. However, they actualized the quantitative approach only using the Likert scale, so the respondents could not express their perception largely. They also picked one perspective only between students or lecturers. This research argues that their perspective should be elaborated for a more holistic understanding.

Also, distance learning in Indonesia faces many technical challenges that affect its smoothness. From an astronomical view, the Indonesian territory includes three time zones. For example, lecturers starting at 9 a.m. on West Indonesian Time are equivalent to 11 p.m. on East Indonesian Time. In addition, IT infrastructure needs to be distributed appropriately. In implementing e-learning before the pandemic, students will live around campuses where the availability of IT infrastructure is relatively adequate. Students are scattered in their respective regions of origin with different profiles of infrastructure availability (Ministry of Education and Culture of Indonesia, 2020). It also affects fluency in participating in the distance learning process. Based on the urgency of the problem and the gaps in the issue of distance learning, this study formulates a research question: "How did students and lecturers adapt to distance learning during the pandemic?" That question should be followed up by identifying the necessary strategies for distance learning in the post-pandemic era.

This research offers updates regarding digital transformation in the education sector due to the COVID-19 pandemic. Many articles brought Indonesian higher education as a case study. However, they performed the quantitative approach with these limitations: they took the students' perspective or lecturers' one only, respondents could not express perception largely because of the Likert scale option only, and they did not specify lessons for distance learning in post-pandemic later. This study evaluated the adaptation process in implementing distance lectures at the higher education level from lecturers' and students' perspectives. This article brings empirical data from Indonesia with various situations: different time zones, IT infrastructure, and readiness/experiences. Also, the qualitative approach lets the respondents express their perceptions more freely. The expected theoretical benefit is the study of e-learning and distance learning when the distance learning process is carried out suddenly due to a pandemic. Meanwhile, the expected practical benefits of this research become input for universities to formulate policies, standards, and procedures that are more effective and efficient in implementing distance learning.

This research also offers updates regarding the approach and reach of respondents. Research that discusses distance learning is dominated by quantitative approaches, such as Bork-Hüffer et al. (2021), Coulange, Stunell, & Train (2021), Lichand (2022), and Zarzycka et al. (2022). The contribution offered in this research is the exploration of in-depth information regarding the experience of educators and students for one year in adapting to distance learning. This contribution is supported by a research design that includes students and lecturers.

2. METHODS

2.1. General Phases

In general, this research actualizes two types of research. First, this research is a form of exploration to explore how phenomena have occurred in the object of research and how the object of research responds to them. Therefore, this research actualizes the type of exploratory research. Second, this study also actualizes qualitative survey research since it requires more detailed information and allows respondents to express their opinions. Although it gathered textual data, this research classified them through codification and content analysis to reveal respondents' opinion patterns.

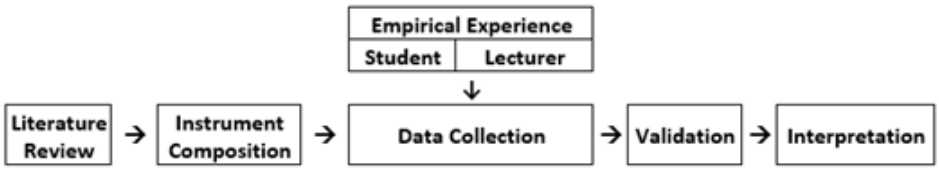

Figure 1. Research Phases

2.2. Instruments Generation

This research developed indicators/questions for data collection based on the extracted instruments. The indicators were cascaded from the literature review by selecting the relevance. This research adopted the prior work in the literature review to generate an instrument, especially to capture the respondent's perception. For example, this research captured students' achievement and interaction in distance learning following Mushtaha et al. (2022). This research performed the online data collection process by considering the ongoing pandemic. Interview techniques with open-ended questions (as shown in Tables 1 and 2) aim to obtain textual data from respondents. This research codified the textual data to obtain patterns between homogeneous/convergent and heterogeneous/divergent respondents. The pattern is also reviewed against the respondent's profile to detect a correlation between the respondent's profile and the experience gained.

Table 1. Instruments for Students

Aspect	No.	Question
Experience	S.01	Describe your experience in taking distance learning before this pandemic!
Learning style	S.02	What was the style of communication between you and lecturer in distance learning?
	S.03	Describe your learning style BEFORE this pandemic occurred?
	S.04	Describe your learning style DURING this pandemic?
	S.05	How did you adapt your learning style in distance learning?
	S.06	Explain how your lecturer's teaching style is in distance learning!
	S.07	Explain how you were trying to catch up with the learning materials!
Organizational support	S.08	Did your university institutions provide clear guidelines about "do versus don't" in distance learning?
	S.09	How much was your expenditures spent on distance learning?
	S.10	Did the institution provide financial support to take distance learning?
Platform	S.11	What IT hardware did you use to join distance learning?
	S.12	What did you think about information security during distance learning? Did you have any concerns about an information security incident?
	S.13	Was the distance learning platform easy to use?
Behavior	S.14	How did you increase your self-awareness and commitment to distance learning?
	S.15	Did distance learning provide the benefit of flexibility in time and location?
	S.16	What were factors influencing your activeness in distance learning?

	S.17	Did distance learning cause difficulties in managing the daily agenda?
	S.18	Have the other students' enthusiasm and activeness in the class contributed to your interest and satisfaction with distance learning?
Outcome	S.19	How your opinion about students and lecturers' satisfaction with the distance learning?
	S.20	How would you rate your own activeness in the distance learning?
	S.21	How were your achievements related to learning outcomes in courses?

Table 2. Instruments for Lecturers.

Aspect	No.	Question
Experience	L.01	Describe your experience in distance learning before this pandemic period!
	L.02	Have you received training in managing distance learning? If yes, how do you develop that experience now?
Teaching style	L.03	Describe the teaching style that you apply in distance learning?
	L.04	What was the communication style in distance learning?
	L.05	How to adapt the teaching/learning style in distance learning?
	L.06	How did you increase your self-awareness of conducting distance learning?
	L.07	Did distance learning give benefit from flexibility (time and location)?
	L.08	Did distance learning cause difficulties in managing the daily agenda?
Organizational support	L.09	How can your institution provide clear guidelines "do versus don't" in distance learning?
	L.10	How much was spent on conducting distance learning?
	L.11	Did the institution provide financial support to operate distance learning?
Platform	L.12	What IT tools that you used to support distance learning?
	L.13	Was the distance learning platform easy to use?
	L.14	How was information security during online lectures? Do you have any concerns about an information security incident?
	L.15	What supporting facilities did you have for distance learning?
Outcome	L.16	Did students' enthusiasm and activeness influence your interest and satisfaction with distance learning?
	L.17	How about students and lecturers' satisfaction in distance learning?
	L.18	How were students' activeness in the distance learning?
	L.19	How was the learning achievement in the course?

2.3. Data Collection and Processing

This research collected data in two primary segments using random sampling as detailed in Table 3: students (got Table 1 as instruments) and lecturers (got Table 2). This research required them to have experience in blended learning during the pandemic (2020 to 2021) without specific platforms used. It relied on the online questionnaire to capture their answer and processed them for content analysis using codification techniques.

Table 3. Respondents' demography.

Respondents type	Attribute	Value	Quantity
Students	University	Public	9
		Private	57
	Degree	Undergraduate	57
		Graduate	9
Lecturers	University	Public	11
		Private	46
	Location	West Java	30
		Java Islands (non-West Java)	23

Non-Java Islands	4

3. FINDINGS AND DISCUSSION

3.1. Findings and Interpretation in Students' Domain

As initial profiling, this research categorized the respondents based on the study program. Engineering students dominated the respondents, while the others were from social-humanity and health. This research detailed their composition from the course year/period: 44% in the fourth year or more, 26% in the third year, 18% in the second year, and the rest in the first year. The average respondent took regular courses, while several students only took final projects/theses. This research noticed that 38% of students were in distance learning while helping their parents, 36% were members of the student's club, 12% had part-time/full-time work, and 8% participated in the research activities. This research highlights the importance of features for university academic advisors to monitor students' activity to detect other students' activities that complicate their time management.

In the learning process, most of them used Google Classroom, Google Meet, and Zoom (42 respondents) to join in online class sessions. The rest used the university's default platform (22) and email with social messages (2). Also, the most popular IT devices used were laptops, cell phones, modems, headsets, speakers, mice, and webcams. In the online learning process, most respondents felt more flexible during the pandemic in discussing online conditions because they can participate in online classrooms anywhere and anytime, especially for the asynchronous class sessions. As spoken by two students separately, RS-08 said, "No more traffic jams on the road, so that I can attend the class directly from my or the family room," meanwhile RS-13 revealed, "The time is flexible because students and lecturers can agree to conduct class session out of schedule while the location is also flexible and can be anywhere." As interpretation and ideas for distance learning in the post-pandemic era, this research underlines the university to manifest the learning standards or guidelines that define the primary platform for distance learning and time proportional for distance learning assignments, teaching, and other class activities. Therefore, their load for distance learning can be controlled towards standards compliance.

This research highlighted significant differences in learning styles. Before the pandemic, students were likelier to read the course content, practice the practicum, and discuss it directly. Previously, they perceived most of the knowledge from the lecturer's explanation in class. Meanwhile, during a pandemic, students tend to be forced to be independent, starting by reading slides, listening to lecturers, watching videos, discussing in the online room, doing independent assignments, and exploring independently. However, there was negative sentiment opinion as students unveiled. RS-02, RS-31, and RS-65 underlined several lectures that had misinterpreted the flexibility since they gave many assignments. Many lecturers still focused on assignment scoring without systematically checking the course materials or contents' effectiveness. Considering the improvement in distance learning in the post-pandemic era, this research emphasizes functional requirements in LMS for lecturers: reminders for assignments review and giving feedback to the students. It enables students to introspect since they get the assignment's score transparency. It also makes lecturers estimate more precisely how large assignments are since they should spare time to give feedback to the students, not only scoring.

Students adapted to the latest conditions. For example, students need to learn to use LMS as a distance learning tool, identify and procure the devices, learn independently/self-taught, and routinely work on guided assignments in LMS. They also should learn how to manage time since many assignment submissions were at different due times. Many respondents felt too many assignments (such as weekly quizzes, forums participation, and group assignment) that causes schedule bias since students should spare much more time to do assignments. As an impact, some students did the assignment during the lectures' explanation but did not listen to it. To mitigate

students' gaps in understanding, they said they had performed self-study at home by reading the prepared material or slides. In another way, 14 people (out of 66) chose to discuss and ask friends to catch up.

Regarding institutional support, 26 students feel fully supported, either with tuition deductions or other allowances; 32 students feel that support is insignificant, while eight feel unsupported. From another financial aspect, this research noticed that most respondents spend more than 300 thousand per month on internet and electricity needs. Figure 2 exposes three categories for students' spending money to participate in distance learning. It signalized that distance learning requires the financial ability to accommodate internet access since students do not use free internet access in university.

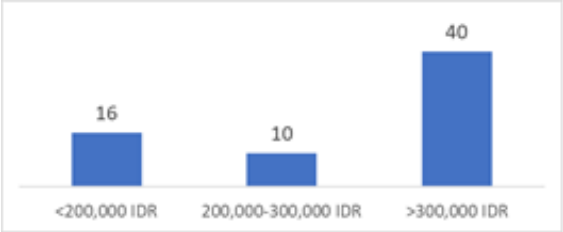

Figure 2. Estimated Monthly Spent Money for Distance Learning (for Electricity and Data Packet)

Based on respondents' experience, 74% felt difficulty in time management since many activities related to distance learning. To increase self-awareness and commitment, students arrange neater scheduling, engage with classmates, keep their motivation, and refresh their motivation and learning goals. Out of 49, 66 students felt less active in online learning activities, 13 were quite active, and only four were very active. RS-22 thought the assignment triggered his activeness as the lecturer instructed, and RS-33, RS-53, and RS-63 supported his statement. Unfortunately, most students felt the opposite since lack of motivation to face many assignments. Moreover, awkward moments could happen since passive students kept silent and made others doubt about actively talking in-class sessions.

Moreover, this research captured several things that may increase activity in distance learning: the number of assignments, the number of responsibilities as students, feedback from lecturers, and the teaching style of the lecturer. However, this research should have highlighted that more assignments could stress students and reduce their enthusiasm. Also, 85% of respondents felt they did not obtain clear guidelines regarding the rules, while 46 out of 66 students expressed dissatisfaction with implementing online lectures. This research also underlined that students' confusion could reduce their intention to actively participate in distance learning, especially from the social influence factor (88% of student respondents feel significantly influenced by the activities of other students in online lectures). Hence, students required proper triggers to activate their behavior, attention, and understanding of distance learning.

3.2. Findings and Interpretation in Lecturers' Domain

Engineering lecturers dominated this research's respondents (41 out of 57). Meanwhile, the others came from social humanities (11), health (one), arts (two), and vocational (three). The teaching experience of 31.6% of respondents is 3 to 5 years, 24.6% is less than three years, 22.8% is 6 to 10 years, and 21.1% is above ten years. When they filled out the questionnaire, most had one to three classes taught. Interestingly, 41.67% of respondents claimed they had performed online lectures before, 36.11% said they had known but were not used to it, and the others had never performed it. Based on the survey results, 50.88% of lecturers have attended training to prepare online lectures, while the remaining 49.12% have never attended. It reflected that the proportion between trained vs. no trained was relatively balanced.

Additional IT devices to support lectures in distance learning were headphones/earphones, microphones, web cameras, spotlights, pen displays, and hardware components needed during the practicum. Also, they needed several supporting software: video conferences, video editing, screen recorder, office applications, and simulator software. Based on the survey results, the popular communication media was the asynchronous mode (Fig. 3). This asynchronous communication media allows lecturers to respond to questions from students anytime and anywhere.

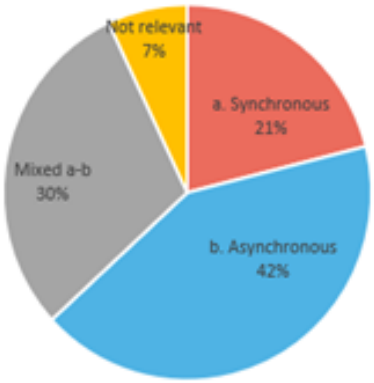

Figure 3. Preferred Media in Distance Learning

The pandemic significantly changed the lecturers' teaching styles. Lecturers performed several variations in delivering material, increasing interaction in discussion forums, and evaluating the learning. Most lecturers delivered the material by conducting video conferences or making video presentations/video tutorials. Several lecturers conventionally prepare material by sending course materials (such as slides or handouts) that were modified by adding notes, sound recordings, or animations, making them more interactive. Lecturers also conducted and moderated the discussion forums in various ways: direct discussions during meetings with video conferences or discussion forums on e-learning or communication media (text, voice recordings). Learning evaluation was performed by various online evaluation media (such as online quizzes) or when managing a video conference. Those findings exhibited that lecturers also adapted the teaching style to provide the best results for students during distance learning. In addition, lecturers shared their knowledge and experience, which triggered them to escalate enthusiasm and innovation to perform better distance learning. Sharing knowledge was vital since some lecturers' experience practicing distance learning was lacking. RL-01 recognized that he performed synchronous sessions using video conferences.

Meanwhile, they utilized the social message application and LMS for course material distribution, assignments, and quizzes asynchronously. Although they were different universities, RL-05, RL-11, and RL-50 also ran similarly. This pattern indicated that the lecturers had analyzed the different contexts of synchronous versus asynchronous based on their purposes. To ensure effective and efficient content delivery, they chose synchronous, while the assignment with a more flexible timeline (outside the class schedule) was more proper in asynchronous mode.

The implementation of distance learning also has obstacles or challenges for lecturers. One of them was the additional costs incurred, as indicated that 68.42% of respondents did not perceive additional financial support during online learning. Lecturers faced additional costs for internet and electricity quota, which was about IDR 300,000 per month. This challenge was also related to Al-Naabi, Kelder, and Carr's statement (2021) that said the institution's support was essential, including financial support. This research argued that incidental distance learning gave the institution no preparation to formulate adequate financial support. Furthermore, the institution can set financial support to stimulate lecturers to organize distance learning with more quality.

The next challenge was managing time and concentration between the responsibilities of a lecturer and a parent. The double roles appeared simultaneously since the lecturers' children also did online schooling. In addition to challenges and obstacles, online lectures also have advantages: flexibility in time and place. The survey results showed that most lecturers agreed on the time and location flexibility during online lectures (92.98%). Moreover, it was captured during the pandemic, suddenly pushing the lectures to perform distance learning.

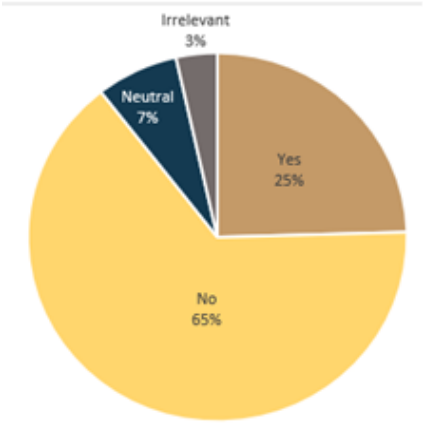

Figure 4. The Effect of Information Security on Distance Learning

Although the lecturers experienced difficulties implementing online lectures, most respondents said using the online lecture platform was easy (85.96%). Surprisingly, this research revealed that concerns about information security did not affect the implementation of online lectures (Fig. 4). It may be influenced by most circulated information being public and limited, not confidential. However, it signaled the importance of emphasizing information security awareness to the lecturers since confidential information can cause serious incidents, such as student scoring.

Distance learning without complete preparation since the pandemic was good. It was signalized from these outputs: (1) lecturers' satisfaction with the course material delivery, (2) students' activeness according to the lecturer, and (3) learning outcomes achievement. This research also portrayed the percentage rate of lecturers' satisfaction with the implementation of distance learning: 45.61% of respondents were absolutely satisfied, 14.04% were quite satisfied, and 26.32% were dissatisfied. It proved that lecturers had satisfaction with distance learning, although they performed it suddenly with limited preparation. However, this research noticed that their understanding had influenced the satisfaction rate since their limited preparation during the pandemic. In the future, their tolerance to achieve satisfaction would be lower, so they could not feel satisfied quickly and have a higher satisfaction standard.

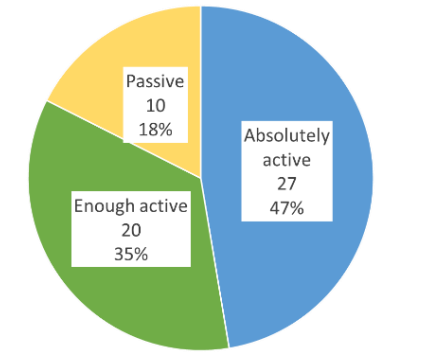

Figure 5. Lecturers' Perception on Students' Activeness

From the lecturer's perspective, Fig. 5 exhibits the percentage of student activity toward implementing online lectures. It shows an almost balanced percentage between active and inactive students in implementing online lectures. 47.47% of lecturers stated their students were Absolutely Active in online lectures, while 35.09% and 18% of others thought their students were Enough Active and Passive during distance learning, respectively. RL-24 said that the students were more active than in face-to-face lectures. Furthermore, RL-25 underlined that students were so bolder in expressing opinions. However, RL-29 stated that their students required triggers because they were more passive. RL-43 and RL-50 also felt their students' activeness and passiveness were the same as in previous class sessions (onsite before the pandemic). Therefore, students' passiveness was still a big challenge since it could reduce other students' and lecturers' enthusiasm during distance learning. It was in line with Ho et al.'s claim (2020) that underlined the significance of social factors influencing student attitude.

Finally, this research also noticed that 71.93% of lecturers declared that learning outcomes had been achieved, but 15.79% expressed their failure to achieve the learning outcome, and the rest felt confused. According to RL-30, the learning outcome was achieved well, while RL-36 declared that most of his students could capture the material presented based on the submitted assignments. In contrast, RL-31 argued that his students' scores tended to decrease. Like him, RL-35 stated scoring standard should be adjusted by prioritizing the students' activity. This research highlighted that 15.79 should have attention since university courses had sequential order. A failure in a specific course can reduce their readiness to take other courses. Therefore, the lecturer should prepare a mitigation plan to anticipate students' failure, even if they are separated physically.

3.3. Discussion

Generally, students feel more flexible in time and location to learn anywhere and anytime. As spoken by respondents, this research's findings were in line with the previous statement from Gurajena, Mbunge, and Fashoto (2021) and Alabdulkarim (2021) about flexibility in distance learning. However, students had difficulties managing time due to more complex activities than before the pandemic. It was also suitable with findings by Gaba, Bhushan, and Rao (2022) that underlined students' opinions that distance learning made them more productive. For learning styles, students need to quickly do several things related to implementing online lectures, such as reading up on the course materials or conference tools and consistently checking assignments and announcements in LMS.

In addition, online classrooms make students study independently from very varied sources. When students cannot understand a material, they can repeat it through the recording provided or various external links. Therefore, these situations mandate that each student has personal motivation and initiative. Some students read, watch videos, and study independently, but some prefer to ask friends or people who understand. Hence, student motivation is strongly influenced by other students. It is supported by Ho et al. (2021), who revealed that social factors strongly influence student attitudes. Therefore, this research reminded the lecturers to prepare distance learning or online class session with more mature planning. As Rudenko et al. (2020) and Arsenijević et al. (2022) suggested, engagement and social presence should be accommodated in their planning. Moreover, the many assignments instructed during asynchronous mode should be completed with appropriate discussion through explanation and feedback to reduce students' lack of motivation (Escomes et al., 2021). This research also highlights the training for students to adapt well to perform their best during distance learning without problems with their adaptability on application utilization, as Pham, Le, and Do (2021) suggested.

Regarding the process, lecturers should make variations in teaching and learning methods to provide and maintain motivation to maintain the learning process and make students active in class. Also, institutions can make guidelines and standard descriptions of the online classroom to become shared understanding. Therefore, understanding the course and its assignments can be appropriately

understood. In addition, the guidelines for the hours and places of discussion can be more regular to fix students' time management. Finally, this research argued that the institutions should supervise lecturers' planning. Mavroudi and Papanikolaou's analysis (2020) supports this argumentation since they have proved that online course design requires much time through mature planning.

4. CONCLUSIONS

This research highlighted significant differences in learning styles. During a pandemic, students tend to be forced to be independent, starting by reading slides, listening to lecturers, watching videos, discussing in the online room, doing independent assignments, and exploring independently. Based on the respondents' experience, most felt difficulty managing time since many activities related to distance learning. To increase self-awareness and commitment, students arrange neater scheduling, engage with classmates, keep their motivation, and refresh their motivation and learning goals. The pandemic also significantly changed the lecturers' teaching styles. They performed several variations in delivering material, increasing interaction in discussion forums, and evaluating the learning. Most lecturers delivered the material by conducting video conferences or making video presentations/video tutorials. Distance learning without complete preparation since the pandemic was relatively good, as signalized from these outputs: (1) lecturers' satisfaction with the course material delivery, (2) students' activeness according to the lecturer, and (3) learning outcomes achievement.

This study believed the insight could be enriched by expanding the respondents (students and lecturers) from various demography. It can improve the value of sample representativeness to bring a trustable landscape of distance learning to Indonesia. Also, the strategies should be formulated more systematically by adopting appropriate methods, such as SWOT or TOWS metrics. This research also reminded the importance of LMS to accommodate students' and lecturers' requirements in distance learning so that LMS should be adjusted following current requirements in the pandemic era. Another finding showed that information security got little concern from students and lecturers. It signalizes a promising topic to explore what are factors influencing their awareness of information security during distance learning performed. Moreover, further research in the technical aspect can appraise the protection of personal data in LMS as the primary tool in distance learning since it records students' behavior and the lecturer's crucial data.

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